DOCUMENT RESUME

ED 305 985 JC 890 217

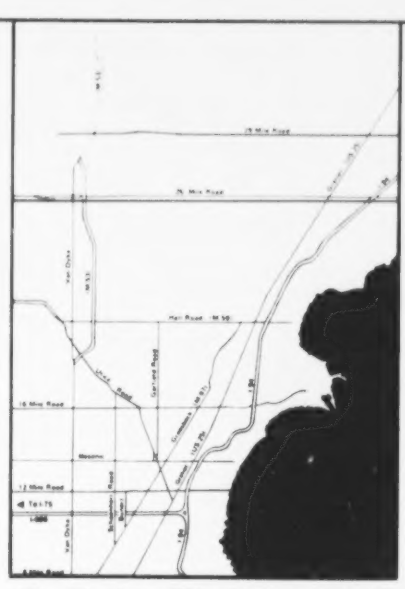
TITLE	Macomb 2000: Toward a Brighter Economic Future.
INSTITUTION	Macomb County Community Coll., Warren, Mich.
PUB DATE	88
NOTE	15p.
PUB TYPE	Reports - Research/Technical (143) -- Reports - Evaluative/Feasibility (142)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	*College Planning; Community Colleges; *Economic Development; Educational Needs; Futures (of Society); Job Training; Labor Needs; Population Trends; School Business Relationship; School Community Relationship; Two Year Colleges

ABSTRACT

Based on more than a year of research on factors affecting the economic future of Macomb County in Michigan, this paper examines employment and population trends, looks at the ways in which these trends influence the workplace, and identifies factors in the county's future growth and economic development. The first section considers trends that will affect the county's ability to build a sound economic base, such as the transition from manufacturing toward service industries in a county where more than 40% of the workforce is currently employed in the manufacturing sector. This section also considers the potential use of the county's strong manufacturing infrastructure to create more service sector jobs, such as drafting and design, computer programming, software design, and financial services. The next section focuses on educational considerations, including: (1) the relationship between educational attainment and earning potential; (2) increasing demands for an educated, rather than skilled, workforce; (3) educational levels in Macomb County; (4) the skill levels of new entrants into the manufacturing workforce; and (5) retraining the existing workforce and all displaced workers. Following a section that describes the demographic make-up of the workforce in the year 2000, the paper closes with a discussion of ways of attracting new business to Macomb County. An appendix lists 30 job training and retraining programs in Macomb County. (AYC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED305985



MACOMB 2000:

TOWARD A BRIGHTER ECONOMIC FUTURE

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

B. Pritchard

C. B. Ahles

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Macomb Community College

JC 890 217

MACOMB 2000:
TOWARD A BRIGHTER ECONOMIC FUTURE

> ***The key to the future of work is the recognition that routine repetitive, fragmented work by humans [traditional manufacturing work] is increasingly inefficient. It is already outmoded in the high technology nations. So those kinds of jobs will continue to decline, no matter what companies, unions, and governments do.***
>
> **—Alvin Toffler**

There are major changes underway on the employment scene as Macomb County approaches the 21st Century. These trends are shaping the way we work, think, solve problems, and ultimately, our quality of life.

In most cases, these trends are irreversible, but this does not mean the county is helpless in determining its future.

Within the trends there are definite choices. These choices will shape how well our community functions as the transitions develop and shape our workforce in the year 2000 and beyond.

In order to provide a sound basis for decision making, Macomb Community College undertook more than a year of in-depth research and study to identify the key factors influencing our economic future.

This document examines these trends, looks at how they are affecting the workforce, and presents some of the issues Macomb's decision makers must address in positioning the county for future growth and economic development.

Albert L. Lorenzo
President

© Macomb Community College 1988

DEVELOPING A SOUND ECONOMIC BASE

Over the next two decades most of the nation's growth and many of its greatest opportunities for entrepreneurship and application of new technologies will arise in the service sector...
—Scientific American
December 1987

Nationally and in Macomb County, manufacturing has made a remarkable recovery since the recession of the early 1980s, when foreign competition and emerging technologies led to the permanent loss of thousands of jobs.

Boosted by a strengthening economy, increased productivity, and assimilation of new technologies and manufacturing techniques, American manufacturing is once again on a sound footing.

This revitalization, though, is being overshadowed nationally by the rise of the service industries. Manufacturing, though still a significant force, will command a much smaller share of the overall economy by the year 2000.

The transition from manufacturing toward the service industries will become a dominant force in American economic development.

The Rise of The Service Industries

Almost all new job increases by the year 2000 will be in the service industries. Although there will be some new jobs created in manufacturing, especially in the high tech areas, these increases will be more than offset by cutbacks in jobs in many traditional manufacturing areas.

The Changing Occupational Structure, 1984-2000

OCCUPATION	CURRENT JOBS (000s)	NEW JOBS (000s)	RATE OF GROWTH (Percentage)
TOTAL	**105,008**	**25,952**	**25**
Service Occupations	16,059	5,957	37
Managerial and Management-Related	10,893	4,280	39
Marketing and Sales	10,656	4,150	39
Administrative Support	18,483	3,620	20
Technicians	3,146	1,389	44
Health Diagnosing and Treating Occupations	2,478	1,384	53
Teachers, Librarians, and Counselors	4,437	1,381	31
Mechanics, Installers, and Repairers	4,264	966	23
Transportation and Heavy Equipment Operators	4,604	752	16
Engineers, Architects, and Surveyors	1,447	600	41
Construction Trades	3,127	595	19
Natural, Computer, and Mathematical Scientists	647	442	68
Writers, Artists, Entertainers, and Athletes	1,092	425	39
Other Professionals and Paraprofessionals	825	355	43
Lawyers and Judges	457	326	71
Social, Recreational, and Religious Workers	759	235	31
Helpers and Laborers	4,168	205	5
Social Scientists	173	70	40
Precision Production Workers	2,790	61	2
Plant and System Workers	275	36	13
Blue Collar Supervisors	1,442	–6	0
Miners	175	–28	–16
Hand Workers, Assemblers, and Fabricators	2,604	–179	–7
Machine Setters, Operators, and Tenders	5,527	–448	–8
Agriculture, Forestry, and Fisheries	4,480	–538	–12

SOURCE: Hudson Institute

Service sector jobs dominate the high rate of growth jobs in the 1984-2000 period.

Macomb County
Employment by Industry

	Number of Employees	Percent of Employment
Manufacturing	91,282	45.7%
Retail Trade Eating & Drinking Places 7.3%	43,578	21.8%
Services Health Services 7.9%	38,324	19.2%
Wholesale Trade	8,397	4.2%
Finance, Insurance & Real Estate	6,443	3.2%
Contract Construction	5,492	2.8%
Transportation & Public Utilities	5,325	2.7%
Agricultural & Other	861	0.4%

Source: County Business Patterns, 1982, Michigan

Manufacturing dominates the employment force in Macomb County.

This shift will have a decided effect on Macomb County, where more than 40 percent of the workforce is directly employed in manufacturing. Like any other period of adjustment, though, it also presents great opportunities.

With manufacturing accounting for 45.7 percent of all jobs in Macomb County, it remains the dominant employment force. Additionally, it accounts for 61.9 percent of the county's total annual payroll.

While it is important to the county to maintain and develop our manufacturing base, it is equally important to the overall economy to develop and nurture high-quality service sector jobs that pay high wages.

Service sector work has both high and low wage jobs. As Macomb County develops new service sector jobs, will they be predominantly in the recreational, retail, and food processing industries, which are traditionally low paying? Or can the county create a climate conducive to attracting the higher-paying service sector jobs? The answer to these questions will play a major role in shaping Macomb's workforce in the year 2000.

Developing Service Sector Jobs from A Strong Manufacturing Base

Utilizing the county's strong manufacturing infrastructure, more substantial service sector jobs can be created in the area of manufacturing services, such as drafting and design, computer programming, software design, communications, and financial services.

Engineering services is an area where this high-paying service sector job growth has already begun. The largest engineering services firm in the state is located in Macomb County, with several smaller firms already well-established. With Macomb's strong manufacturing base, engineering services has the potential to become a multi-billion dollar industry within the county.

High technology research and development firms are another source of high-paying service sector jobs. The respected British economic journal, *The Economist*, recently noted that the fastest-growing technology corridor in America is no longer California's Silicon Valley or Massachusetts' Route 128, but rather it is Michigan's Automation Alley, stretching from Ann Arbor northeast to Sterling Heights.[1]

Most of the Macomb County jobs in Automation Alley are in areas supporting advanced manufacturing technologies. These higher-paying service sector jobs are closely related to the research and development area jobs in Oakland County. The primary concentration of these new jobs can be found in companies located in Macomb's northwest section, along the Oakland County border.

Though these are very positive starts, Macomb is far behind its neighboring southeastern Michigan counties.

Oakland County has already made significant strides in the direction of research and development centers. This has resulted in the creation of thousands of higher-paying service sector jobs. This is partially responsible for the steadily increasing gap in per capita personal income between Macomb and Oakland Counties.

Most of these new higher-paying service sector jobs require employees that are better educated, with a significantly higher level of job skills.

A better educated workforce is going to be an essential factor in determining whether this trend continues and spreads throughout the county.

Per Capita Personal Income in Macomb and Oakland Counties

	1976	1977	1978	1979	1980	1981	1982	1983	1984
Macomb	$7,500	$8,603	$9,566	$10,445	$10,846	$11,595	$11,996	$13,041	$14,498
Oakland	8,667	9,891	11,874	13,119	13,648	14,497	14,944	16,031	17,837
Difference	$1,167	$1,288	$2,308	$2,674	$2,802	$2,902	$2,948	$2,990	$3,339

The significantly greater number of high paying service sector jobs in Oakland County accounts, in part, for the growing difference in per capita income between Oakland and Macomb Counties.

WHAT IS MEANT BY "SERVICE INDUSTRIES?"

What exactly is a service industry? There are many misconceptions about the types of businesses that constitute the service industries.

One definition describes it as "all economic activities whose output is not a physical product or construction, is generally consumed at the time it is produced, and provides added value in forms (such as convenience, amusement, timeliness, comfort, or health) that are essentially intangible concerns of the first purchaser." [2]

A much simpler way of defining service industries describes them as almost all industries outside of manufacturing and agriculture.

In the minds of many people, the term "service industries" carries a negative connotation. They caricature service sector workers as "hamburger-flippers" and "shoe salespersons." These people see service sector jobs as less important to a sound economy than product production.

There are many low-paying jobs in areas such as food processing and the retail trades in the service sector, but there are also many high-paying jobs in areas such as health care, finance, communications, and engineering services. Many service sector firms provide crucial services, not only to consumers, but also to product manufacturers.

While a sound manufacturing base is a necessity for every developed nation, it is often the level of services available—in areas such as health care, education, transportation, communications, and social services—that determine quality of life.

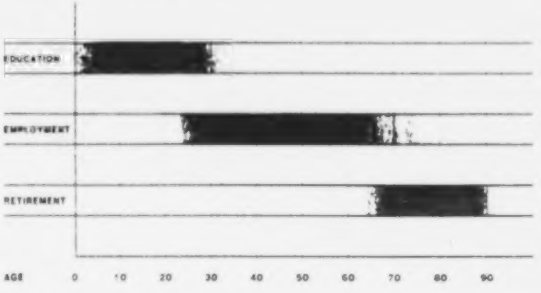
FROM A SKILLED WORKFORCE TO AN EDUCATED WORKFORCE

> ***The key employment issue of the future isn't whether jobs will be there for people, but whether qualified people will be there for jobs.***
> **—John Naisbitt**

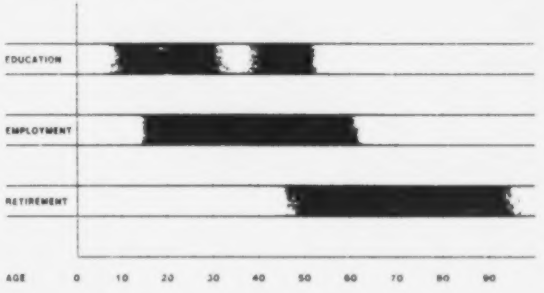
Lifelong education is becoming an essential part of the world of work, both in manufacturing and the service sectors. It has been predicted that one-third to one-half of all Michigan workers will require some additional education by the year 2000.

Rapid technological change, coupled with the increasing trend toward mid-life career changes, has made lifelong learning an integral part of the information age.

Traditional Life-Style Patterns



Emerging Life-Style Patterns



Traditional life-style patterns divided an individual's life into education, employment, and retirement segments. As the emerging life-style patterns have developed, the three segments have began to overlap, with education becoming much more of a lifelong experience.

Education and Earning Potential

The ability for individuals to share in future economic growth will depend, to a large extent, upon their ability to develop and maintain job skills that are current with the demands of the marketplace.

Career growth, competitive wages, and lifelong education will be strongly linked in many sectors of the workforce as we approach the year 2000.

A generation ago, a high school degree was enough to qualify for most of the well-paying jobs available in manufacturing. The jobs helped create a high quality of life for most of Macomb County's workforce, but those jobs are no longer being created and many of the existing jobs are being phased out by automation. There is little doubt that this era is coming to an end.

Very few workers entering the workforce today with limited education or skills will be able to attain "middle-class" living standards. Current trends clearly show that educational attainment levels will increasingly determine income levels.

This means that those with greater education and training will find it easier to find a high-paying job and will advance more quickly. Those with lower educational attainment levels will find it harder to find a job, and when they do find one, it will most likely be in the low-paying jobs with little chance of advancement.

Increasing Demands for An Educated Workforce

As we move toward the year 2000 the economy will increasingly require workers to possess a greater variety of skills, with greater versatility in their applications.

"Work," as we know it, especially in manufacturing, is changing rapidly. The system of a few people at the top giving orders and many more at the bottom performing repetitive tasks is fading fast.

As technology increasingly becomes a part of the workplace, it is no longer enough to simply "train" a worker to perform a function. Workers must be able to *understand* the work processes, *define* problems, and *develop* solutions. Futurist Alvin Toffler noted, "In the old mass production industries, it was muscles that counted. In the advanced, 'demassified' industries, information and imagination are crucial, and that changes everything."[3]

In past decades, the employment questions were fairly simple. In good economic times the question was "will we have enough people to fill the jobs." In bad economic times the question was "will we have enough jobs for the people."

In a service and information-based economy the primary employment question will be "do we have enough *educated* people to fill the skill-demanding jobs?"

As we speed toward the 21st Century and a workforce requiring greater and greater levels of educational attainment, it appears the answer to that question in Macomb County will be "no." The county has the lowest percentage of college graduates of the four counties in southeastern Michigan.

Educational Attainment of Macomb County Adults

	People	Percent
8th Grade or Less	53,540	13.5%
High School—1 to 3 years	68,803	17.3%
High School Graduates	167,881	42.3%
College—1 to 3 years	63,922	16.2%
College—4 or more years	42,434	10.7%
Total County	**396,580**	**100.0%**

Only 10.7 percent of Macomb County's adult population have attained a four-year degree. Almost three time as many have not attained a high school degree.

Educational Levels in Macomb County

Only 10.7 percent of the county's adult population have attained a four-year degree. Almost three times as many have not attained a high school degree.

This provides a one-to-three ratio of college graduates to high school dropouts. In neighboring Oakland County the ratio is less than one-to-one. This is one of the main reasons Oakland County has been so successful in developing the industries that create the high-paying service sector jobs.

Educational Attainment of Adults Over Age 25

	Population Over 25	HS Graduates Less Than College	College Graduates
Washtenaw County	141,291	44.9%	36.0%
Oakland County	600,699	53.8%	24.0%
Wayne County	1,350,573	50.3%	11.1%
Macomb County	396,580	58.4%	10.7%

Macomb County has the lowest rate of four-year college graduates in the southeastern Michigan area.

According to Bureau of Labor Statistics projections, the employment share of workers requiring some college education will increase, while the employment share of workers with only a high school education and those without a high school degree will decline.

By 1995, 75 percent of all job classifications will require some post-secondary education or training. Jobs requiring some college education at the entry level will increase by 45 percent.

Additionally, almost half of existing jobs in the nation's workforce will be significantly altered by technological changes over the next 20 years, many through an upgrading of required skills.

These trends are expected to continue into the 21st Century, steadily polarizing the educational "haves" and "have nots" in the workforce. If Macomb County is to remain competitive with its neighbors, this "educational gap" will have to narrow.

Assessing New Entries into The Manufacturing Workforce

The skill shortage is already apparent among new workers entering the workforce. In an April 1988 survey of the state's chief executive officers of manufacturing firms conducted by the Michigan Manufacturers Association, 69 percent reported that the quality of high school graduates applying for jobs was only fair to poor.

As companies are shifting from traditional manufacturing procedures to utilization of the new technologies, this skill shortage is becoming increasingly apparent.

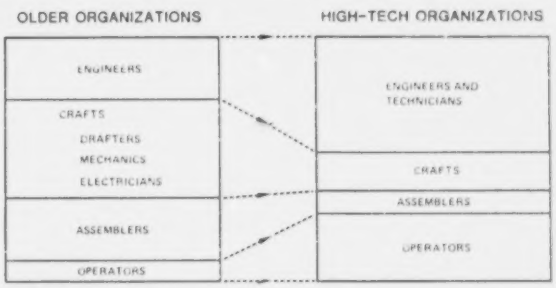
Retraining The Existing Workforce

It will be equally important to provide job skills training for our existing manufacturing workforce as technology increasingly dominates the workplace.

Many workers will be required to develop a whole new set of skills.

General Motors Corporation predicts that a full 50 percent of its workforce in 2000 will be skilled tradespersons (technicians, inspectors, monitors, etc.), compared with only 16 percent in 1980.[4]

Changes in the Technical Workforce for Modern Manufacturing



In the modern manufacturing facility, greater emphasis is placed on the highly skilled positions.

This shift will require a significantly greater number of workers with advanced training.

Most of today's workers are unequipped for the new service sector jobs that are developing. It becomes much more complicated than simply saying five manufacturing jobs disappeared here, but five new service sector jobs are created to replace them.

The increasing applications and usage of robots in manufacturing provides a good example.

While robots significantly increase productivity and quality control, they displace operational workers and require greater operative and applicative skills of those who operate them.

This will mean that many traditional blue-collar jobs will vanish. The new jobs that are created will require significantly greater skills...skills that the displaced workers do not possess.

This leaves retirement or retraining as the only options. For many of these workers in their 40s and 50s, retirement is not an economic option. For society as a whole, their mass retirement or decline into low-paying, unskilled service jobs would be a vast waste of human resources.

Just as companies retool their equipment, they will have to "retool" their workers' skills. If the American economy is to continue to compete in the world marketplace, training and retraining of current workers will have to become a national priority.

Technology has played a major role in displacing these workers, but it has also played a major role in creating the new high-paying jobs. As technology continues to develop and evolve, the number of these higher-paying jobs will grow.

It is important to the well-being of Macomb County's economy and workforce that training programs be made available, accessible, and affordable. Otherwise, *skill shortages* will become the employment crises of the 1990s.

Assuring Job Retraining for All Displaced Workers

Most large companies of 500 or more employees provide in-house training for their workers, but Macomb, with 85 percent of its businesses employing 19 or less workers, is predominantly a county of small businesses. This places a greater responsibility upon the county's decision makers to assure that this training is available. (Major Job Training and Retraining Programs currently in place in Macomb County are listed in the Appendix.)

If current Macomb County educational attainment levels continue, the majority of the county's workforce will *not* qualify for the developing higher-paying jobs.

In order to maintain and enhance quality of life standards that have developed over the past three decades, current and future generations of workers will require a significantly higher level of education. And, if Macomb County is to attract the companies utilizing advanced manufacturing technologies to take advantage of the potential to develop manufacturing services-oriented jobs, it will have to provide a better educated workforce.

The amount of resources that Macomb County leaders are prepared to devote toward creating that better educated workforce is one of the key choices they must make. It will determine how Macomb County emerges from the transition to a service and information industries-orientation.

DEMOGRAPHIC MAKE-UP IN 2000

Organizations from the military services to the trucking industry will be forced to look beyond their traditional sources of personnel. For well-qualified minorities and women, the opportunities will be unusually great.

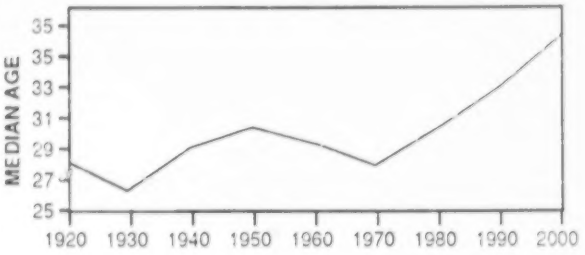
—Workforce 2000:
Work and Workers for the 21st Century

The postwar baby boom saw 76 million births, most are now in their peak working years. In the decade after the year 2000, many of these workers will be leaving the workforce.

Only 41 million births were recorded in the following generation—the 1965-1976 era. This will result in a sharp decline in the number of new workers entering the future workforce.

This decline in new workers will significantly reshape the American workforce and compel many companies to rethink their hiring, employment, and benefit policies.

The U.S. Population is Growing Older
(Median Age)

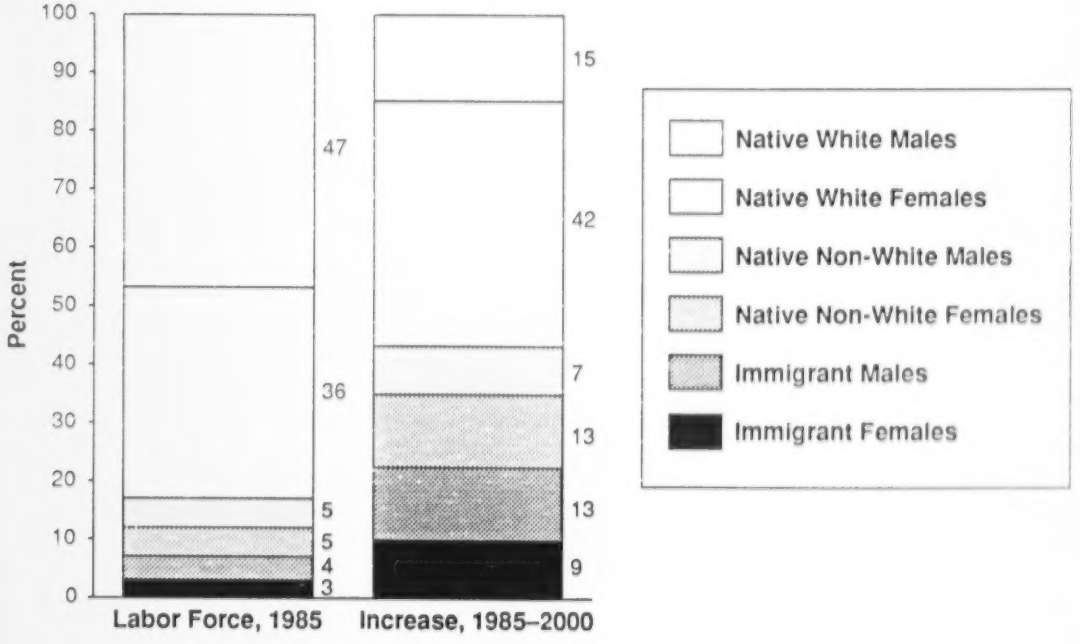


As the U.S. population grows older there will be a sharp decline in the number of new workers entering the workforce.

Reshaping of The American Workforce

Between 1972 and 1986, the workforce averaged an annual growth rate of 2.2 percent per year. As the baby boom generation has matured, though, the number of new workers supplying the workforce has declined. From 1986 to 2000, the growth will average only 1.2 percent per year, the slowest rate of growth since the depression.

Most New Entrants to The Labor Force Will Be Non-White, Female or Immigrants



SOURCE: Hudson Institute

The vast majority of new employees joining the workforce in the year 2000 will be women and minorities.

This diminished labor pool will require the nation's employers to make better use of its existing human resources. More specifically, this means a greater reliance on women and minorities as significant contributors to the workforce.

Women in The Workforce

The number of women in the American workforce has been growing continuously for almost four decades.

Economic pressures requiring two incomes for families to maintain a middle-class lifestyle, combined with a changing social view of working women, have played a major role in the increasing feminization of the workforce.

Through the end of this century, the growing impact of women in the workforce will continue. The Bureau of Labor Statistics projects an annual increase of women workers that is double the increase projected for the labor force as a whole. It further projects that 61 percent of all adult women and 81 percent of women in the 25 to 54 age group will be in the workforce in the year 2000.

One of the greatest changes over the years has been in the number of married women with children in the workforce. Between 1960 and 1984 the number of working mothers grew from 28 percent to 61 percent. In one generation, the number of working mothers has more than doubled.

In the coming years, issues of particular interest to working women, such as on-site child day care, job sharing, flexible work hours, and stay-at-home jobs will take on greater priority for employers seeking the most qualified workers.

Minorities in The Workforce

Minorities, like women, will also become much more dominant in the workforce.

With a 4.1 percent annual increase, Hispanic workers will number 10 percent of the total workforce, up from seven percent in 1986.

Blacks, with a 1.8 percent annual increase, will total 12 percent of the total workforce, up from 11 percent in 1986.

Other racial groups, primarily Asians, will increase at a rate of 3.9 percent per year.

By the mid-1990s, Blacks, Hispanics, Asians, and other minorities will comprise approximately 75 percent of all *new* entries into the American workforce. Only 15 percent of all new workers will be native-born white males, compared to 47 percent in 1986.

It will be important for employers to recognize this major demographic shift and readjust their thinking.

While prejudice is often not intentional, performance standards are frequently based on cultural biases. Managers who do not see the implications of minorities comprising the major share of new workers entering the workforce are doing their companies a disservice.

They risk losing promising talent already in their companies, and they will have a harder time recruiting and keeping good employees in the future.

Also, as minorities become more dominant in the workforce, especially among new workers, minority training programs will take on a greater significance.

Currently, most minority job training programs are government-operated or government-sponsored. As the gap between the number of jobs requiring advanced education and the number of qualified workers broadens, private employers will increasingly take the lead in providing or sponsoring minority job training programs in order to fill their workforce needs.

Flexibility will be the key to success in the future, both for workers and employers. If the majority of new workers entering the workforce are female, Black, Hispanic, and Asian, employers cannot rely on a continuing market of young white males to fill jobs.[5]

Growing Share of Women in The Workforce

	1950	1960	1970	1980	1990	2000
Women in the Workforce (in thousands)	18,389	23,240	31,543	45,487	57,230	66,670
Percent of Adult Women Working Outside the Home	33.9	37.7	43.3	51.5	57.5	61.1
Female Share of Total Workforce	29.6	33.4	38.1	42.5	45.8	47.5

SOURCE: U.S. Bureau of Labor Statistics

The share of women in the American workforce has been steadily increasing over the past four decades and is expected to gain an even greater share by the year 2000.

BUILDING AN ATTRACTIVE CLIMATE FOR NEW BUSINESS START-UPS

> ***While technological upheaval, foreign competition, and economic volatility [have] disrupted the predictable environment large corporations need to maximize secure and growing profits, small business created millions of new jobs, hatched new industries based on technologies that are at the core of future U.S. economic competitiveness, and helped spark a fresh outburst of entrepreneurship...***
>
> —Steven Solomon

There is little doubt that Macomb County can benefit significantly from new business start-ups.

Up to 80 percent of all new jobs come from small businesses. As new businesses, generally small, start up or move into Macomb County it broadens the employment base.

New business start-ups also stimulate and broaden the tax base. This provides for a fairer distribution of school and municipal funding, as well as for municipal development.

Additionally, new businesses are typically more in line with industry trends. More new businesses mean greater economic diversification. Both of these factors unquestionably contribute to a business community's economic health.

With this in mind, how do we build a climate that is attractive to new business start-ups?

Enhancing Access to New Markets

First, "access" within the county must be improved and enhanced. Service sector industries must be able to easily reach clients, or be located where clients can easily access them. Manufacturers must be able to get products to their buyers in a timely and inexpensive manner, especially as "just-in-time" procedures are becoming the norm among large manufacturers

Macomb's highway system must be improved and expanded to meet current and future needs. Most critical is the expansion of M-59. It is located where much of the county's economic development is occurring. It is a link with Oakland County and its expansion will further encourage the concentration of high tech and research and development in Oakland to expand into Macomb.

Another "access" link is the establishment of an airport within the county. This is especially important for private aircraft and air freight. It can serve local pilots and offer an incentive for new businesses, much the same as Pontiac-Oakland Airport has in Oakland County.

Office for Economic Development and Workforce Planning

Another method of making the county more attractive to new business start-ups is the formalization of a county office for economic development and workforce planning.

Currently, there are many local efforts in place that have been very effective on a municipal level. In order to deal with countywide problems, though, a county office is needed. The county office could work in concert with local planning efforts to coordinate large projects and perform information and promotional campaigns.

All major counties in the southeastern Michigan region have offices for economic development and workforce planning. If Macomb is to compete on an equal level, it will need equal facilities.

It will also be able to develop operational plans for local Macomb County municipalities to work together, rather than in competition, for building an attractive climate for new business start-ups.

CONCLUSION

> ***The landscape of the job market is changing under economic and demographic pressures nearly as inexorably as the geological forces that shape the face of the earth. Advancing technology, increasing demand for services and an aging population are just some of the forces burying some occupations and creating high ground for others.***
>
> —U.S. News & World Report
> April 25, 1988

The impact of technological advances and economic and demographic changes on the world of work are unprecedented. These changes will significantly effect the location and development of employment opportunities, as well as reshape and determine the quality of life in whole communities.

Within Macomb County, where manufacturing continues to be the dominant employment and economic force, these changes will have an even greater effect than in most areas.

The recession of the early 1980s shocked us into realizing that changes were on the horizon. The economy in Macomb County is considerably different today than it was just a decade ago. It would be a great mistake, though, to believe the changes are complete.

In the next decade and beyond, the changes may seem more subtle. Cloaked in a stronger national economy, they will, none the less, be far reaching in their overall affect on the county's economy and make-up of its workforce.

Entrepreneurial spirit, business savvy, and a dedicated work ethic have made Macomb County one of the state's leading business centers. If our county is to continue this leadership, these qualities will be needed more than ever.

A fourth quality, however, will also be required. That quality is a *vision for the future*.

Macomb County's workforce in the year 2000 can be one that is planned and shaped in a proactive way that takes best advantage of the changes in the American economy. Or it can be left to develop, possibly flounder, as these changes overtake the workforce.

Over the past four decades, millions of workers have found their piece of the American Dream in Macomb County. A strong *vision for the future* will be necessary for the county to position itself to meet the challenges of the 21st Century and fully utilize the talents and skills of its citizens, so that millions of future workers can also find their piece of the American Dream in Macomb County.

NOTES

[1]Chad Selweski, "State Escaping 'Rustbelt' Tag," *Macomb Daily*, March 31, 1988, p.4A.

[2]James B. Quinn, Jordan J. Baruch, and Penny C. Paquette, "Technology In Services," *Scientific American*, December 1987, p.50.

[3]Alvin Toffler, *Previews and Premises*, (New York: William Morrow & Co. Inc., 1983), p.52.

[4]Fred Best, "Technology and the Changing World of Work," *The Futurist*, April 1984, p.61.

[5]Martha Farnsworth Riche, "America's New Workers," *American Demographics*, February 1988, p.41.

APPENDIX

MAJOR JOB TRAINING AND RETRAINING PROGRAMS IN MACOMB COUNTY

Center for Human Resource Development
Macomb Community College
14500 Twelve Mile Road
Warren, MI 48093
445-7538

Macomb County Community Growth Alliance
115 Groesbeck Highway
Mt. Clemens, MI 48043
469-5285

Community Services Block Grant
Macomb County Community Service Agency
59 North Walnut Street
Mt. Clemens, MI 48043
469-5222

Employment Service
Mt. Clemens Branch Office
35209 Gratiot
Mt. Clemens, MI 48043
791-2930

JTPA Dislocated Worker
Macomb/St. Clair Private Industry Council
59 North Walnut
Mt. Clemens, MI 48043
469-5220

JTPA Education Coordination
Macomb Intermediate School District
44001 Garfield
Mt. Clemens, MI 48044
286-8800

JTPA Indian
Southeastern Michigan Indians
P.O. Box 861
Warren, MI 48090
756-1350

JTPA Older Worker Program
Macomb/St. Clair Private Industry Council
59 North Walnut
Mt. Clemens, MI 48043
469-5220

JTPA PROGRAMS:

Macomb/St. Clair Private Industry Council
59 North Walnut
Mt. Clemens, MI 48043
469-5220

Warren Intake Center
24580 Cunningham
Warren, MI 48091
759-2380

Mt. Clemens Intake Center
75 North River Road
Mt. Clemens, MI 48043
469-7702

Michigan Rehabilitation Services
Mt. Clemens Office
65 Market St., 2nd Floor
Mt. Clemens, MI 48046
465-6126

MJOB-Retrain
Macomb Community College
32101 Caroline
Fraser, MI 48026
296-2055

MOST
Department of Social Services
21885 Dunham Road
Mt. Clemens, MI 48043
469-7700

PARTNERSHIPS FOR EDUCATION:

Romeo Community Schools
316 North Main St.
Romeo, MI 48065
752-4533

Macomb Intermediate School District
44001 Garfield
Mt. Clemens, MI 48044
286-8800

VOCATIONAL EDUCATION IN SECONDARY SCHOOLS:

Mt. Clemens Community Schools
167 Cass Ave.
Mt. Clemens, MI 48043
469-7822

Utica Community Schools
51041 Shelby Road
Utica, MI 48087
739-0400

Warren Consolidated Schools
31300 Anita
Warren, MI 48093
977-6800

SW Macomb Area Vocational Consortium
27100 Schoenherr Road
Warren, MI 48093
445-6328

Source: *Investing In People: A Directory of Michigan's Job Training and Related Services*, Governor's Office for Job Training, 1988, and other reference data.

BIBLIOGRAPHY

"Assembly-Line Education Obsolete." *Macomb Daily*, April 11, 1988, p.4A.

Banks, W.C. "The Way We'll Work: Shorter Hours, Bigger Bonuses." *Money*, November 1985, pp.153-163.

Best, F. "Technology and the Changing World of Work." *The Futurist*, April 1984, pp.61-63

Countdown 2000: Michigan's Action Plan For A Competitive Workforce. Lansing: The Adult Literacy Task Force, March 1988.

Deigh, R., Rachlin, J., and Saltzman, A. "Best Jobs For the Future." *U.S. News & World Report*, April 25, 1988, pp.60-80.

A Feasibility Study for Advancing Educational Programming In Macomb County. Warren: Macomb Community College, February 18, 1986.

Investing In People: A Directory of Michigan's Job Training and Related Services. Lansing: Governor's Office for Job Training, 1988.

Jacobs, J. *Training and Public Policy: Concluding Report.* Ann Arbor: Industrial Technology Institute, March 1987.

Johnson, W.B. *Workforce 2000: Work and Workers for the 21st Century.* Indianapolis: Hudson Institute, June 1987.

"Minority Management." *Personal Report*, April 15, 1988, pp.1-2.

"More Jobs than Skills." *Detroit News*, April 12, 1988, p.10A.

Powers, R. "Graduates Flunk With Employers." *Detroit News*, April 19, 1988, pp.1-2B.

Quehl, G.H. *Higher Education and the Public Interest: A Report to the Campus.* Washington D.C.: Council for Advancement and Support of Education, January 1988.

Quinn, J.B., Baruch, J.J., and Paquette, P.C. "Technology In Services." *Scientific American*, December 1987, pp.50-58.

Riche, M.F. "America's New Workers." *American Demographics*, February 1988, pp.34-41.

Selweski, C. "State Escaping 'Rustbelt' Tag." *Macomb Daily*, March 31, 1988, p.4A.

"Small Business Outlines 10 Steps to Improve Michigan's Business Climate." *Michigan Forward*, March/April 1988, pp.7-9.

Solomon, S. *Small Business USA.* New York: Crown Publishers, Inc., 1986.

Toffler, A. *Previews and Premises.* New York: William Morrow & Co. Inc., 1983.

"Training for Advanced Manufacturing Technologies: Challenge for Michigan Community Colleges." *Liaison Office Newsletter — Industrial Technology Institute*, Spring 1987, pp.1-5.

MACOMB COMMUNITY COLLEGE
BOARD OF TRUSTEES
Steven DeLuca, Chairperson
Christine Bonkowski, Vice Chairperson
James M. Kelly, Secretary
Daniel J. McCafferty, Treasurer
Paul W. Cousino, Trustee
Margaret DeSantis, Trustee
Dominic J. LaRosa, Trustee
Dr. Albert L. Lorenzo, College President

Additional copies are available by writing Vice President for College Relations, Macomb Community College, 14500 Twelve Mile Road, Warren, Michigan 48093-3896

ERIC Clearinghouse for
Junior Colleges JUN 16 1989